

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

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Claims 1-59. (Canceled)

Claim 60. (New): A method for inducing *ex vivo* proliferation of a population of T cells to sufficient numbers for use in therapy comprising contacting a population of T cells *ex vivo* with a surface having covalently attached thereto:

- (a) an anti-CD3 antibody or fragment thereof, which provides a primary activation signal in the T cells, thereby activating the T cells; and
- (b) an anti-CD28 antibody or fragment thereof, that stimulates a CD28 accessory molecule on the surface of the T cells, thereby stimulating the activated T cells,

wherein the anti-CD3 antibody or fragment thereof and the anti-CD28 antibody or fragment thereof are covalently attached to the same surface,

the anti-CD3 antibody or fragment thereof and the anti-CD28 antibody or fragment thereof thereby inducing the population of T cells to proliferate to sufficient numbers for use in therapy.

Claim 61. (New): The method of claim 60, wherein the anti-CD3 antibody is an anti-human CD3 monoclonal antibody.

Claim 62. (New) The method of claim 60, wherein the anti-CD28 antibody is an anti-human CD28 monoclonal antibody.

Claim 63. (New): The method of claim 60 wherein the anti-CD3 antibody or fragment thereof and the anti-CD28 antibody or fragment thereof, are covalently attached to the same surface using tosyl linkage.

Claim 64. (New): The method of claim 60, further comprising:
monitoring the proliferation of the T cells; and
reactivating and re-stimulating the T cells with the the anti-CD3 antibody or fragment thereof and the anti-CD28 antibody or fragment thereof when the rate of T cell proliferation has decreased to induce further proliferation of the T cells.

Claim 65. (New): The method of claim 64, wherein the step of monitoring proliferation of the T cells is by examining cells size or determining the level of expression of a cell surface molecule, and the step of reactivating and restimulating is initiated when T cell size has decreased or when the level of the cell surface molecule has decreased.

Claim 66. (New): The method of claim 65, wherein the cell surface molecule is B7-1 or B7-2.

Claim 67. (New): The method of claim 60, wherein the T cells are induced to proliferate to about 100-fold the original T cell population.

Claim 68. (New): The method of claim 60, wherein the T cells are induced to proliferate to about 100,000-fold the original T cell population.

Claim 69. (New): The method of claim 60, wherein the T cells are induced to proliferate for at least 3 days.

Claim 70. (New): The method of claim 60, wherein the T cells are induced to proliferate for at least 7 days.

Claim 71. (New): The method of claim 60, wherein the surface is a bead.

Claim 72. (New): The method of claim 71, wherein the bead is a magnetic bead.

Claim 73. (New): The method of claim 71, wherein the bead is a polystyrene bead.

Claim 74. (New): The method of claim 60, wherein the surface is a cell surface.

Claim 75. (New): The method of claim 60, wherein the surface is a tissue culture dish.

Claim 76. (New): The method of claim 60, wherein the population of T cells are induced to proliferate to sufficient numbers for use in treating cancer.

Claim 77. (New): The method of claim 60, wherein the population of T cells are induced to proliferate to sufficient numbers for use in treating an infectious disease.